

FIG. 1A

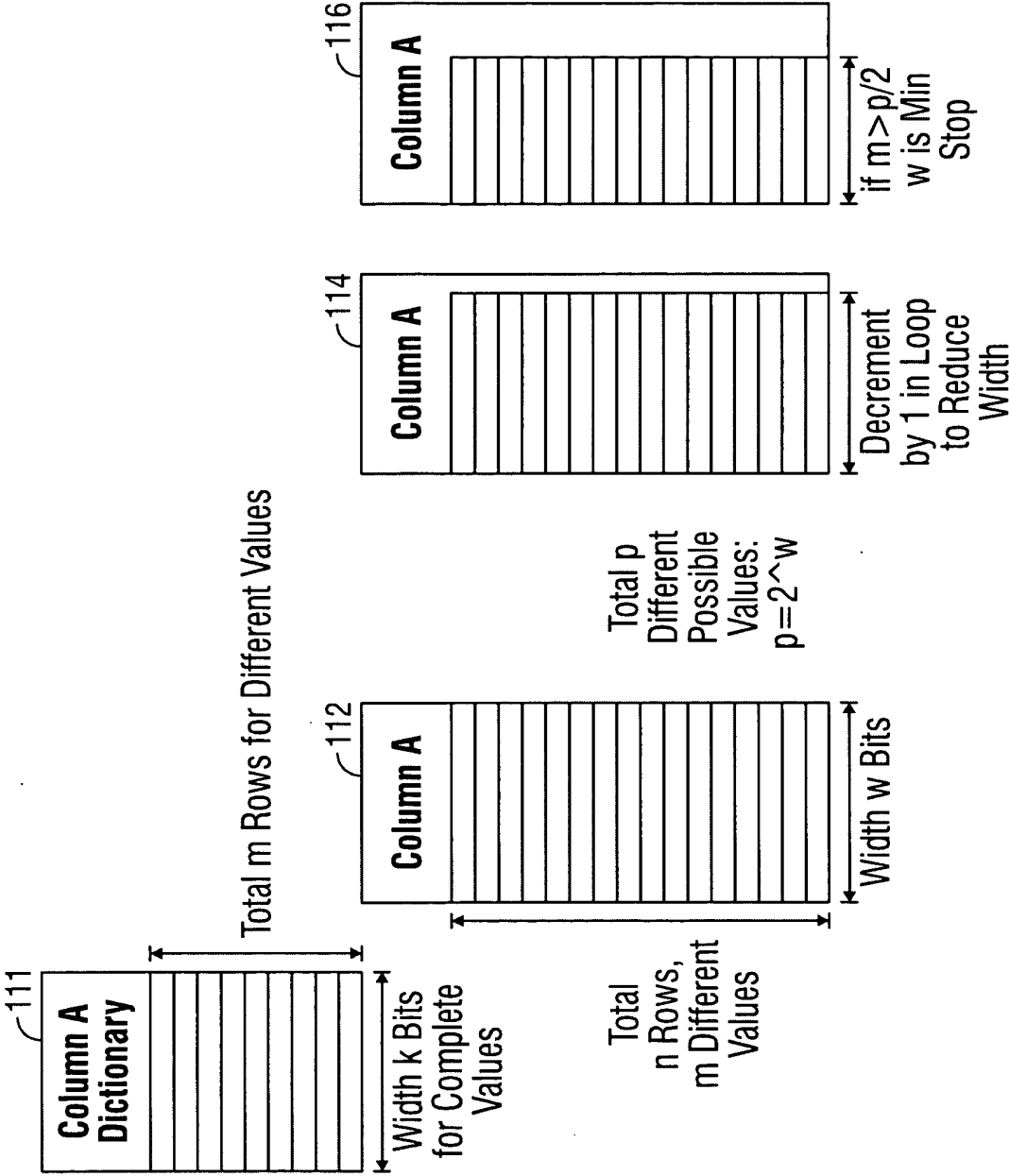


FIG. 1B

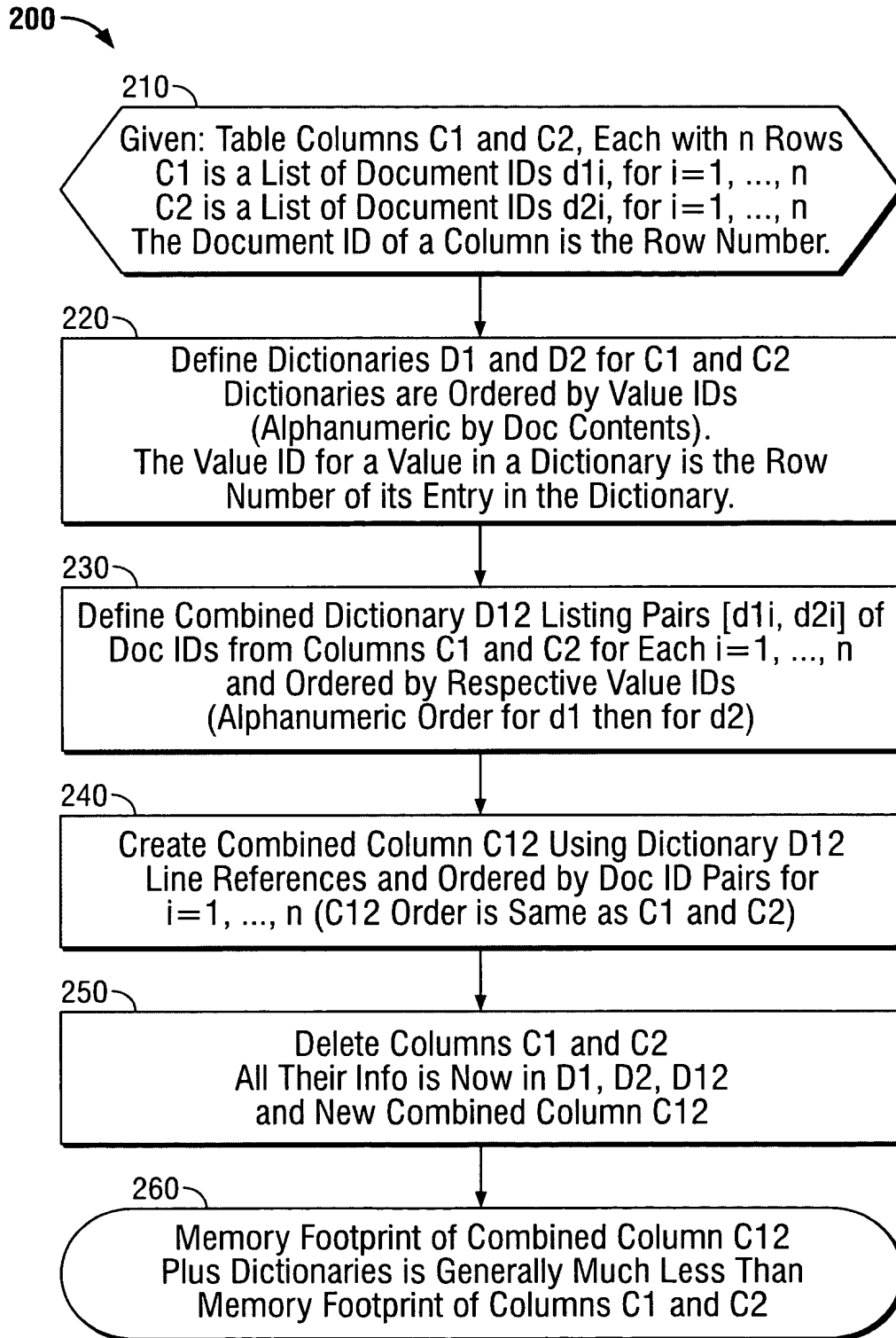


FIG. 2A

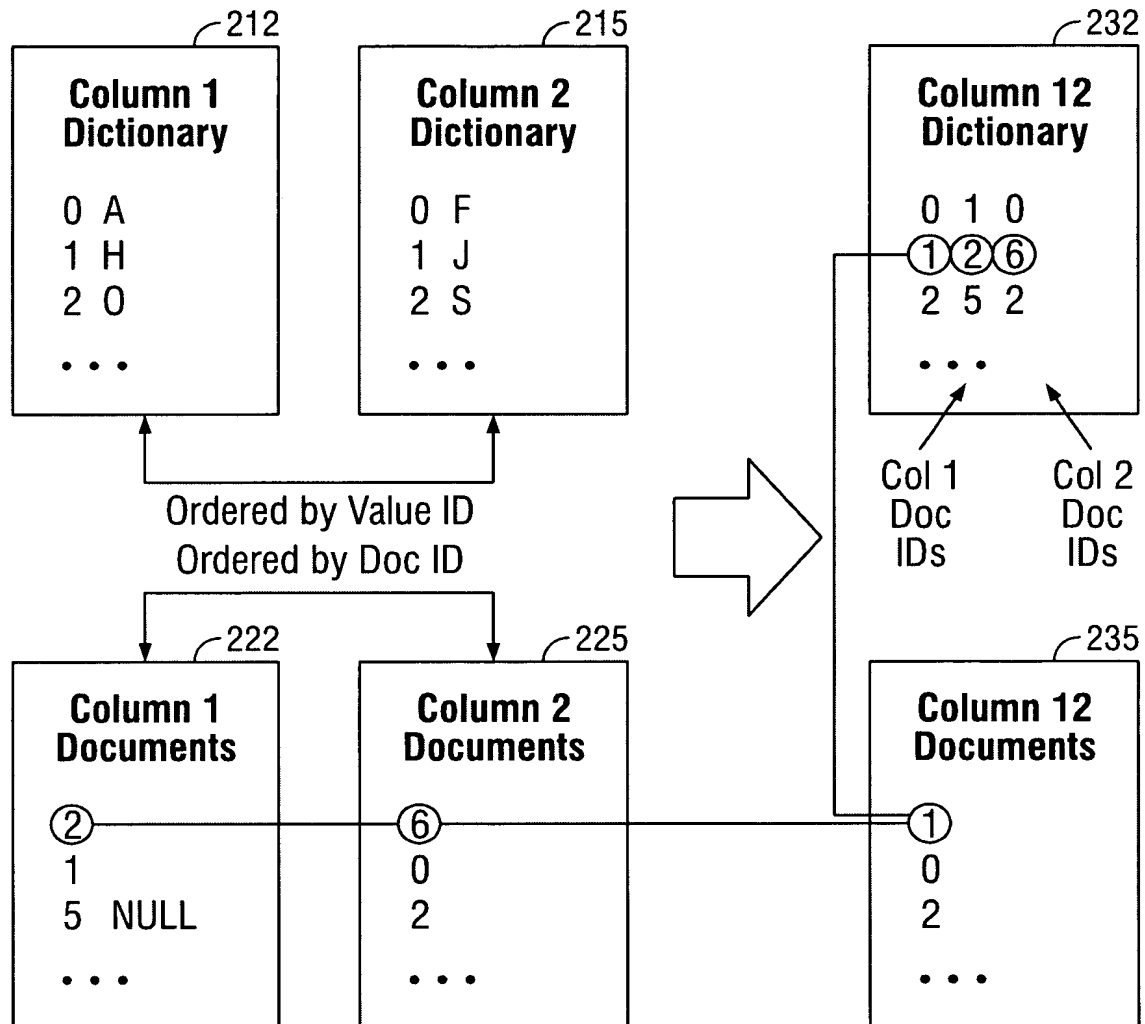


FIG. 2B

310	320	330
335	Memory Required (Bits)	Dictionary
340	Original 1	$m1 * k1$
345	Original 2	$m2 * k2$
350	Combined 12 (Worst Case)	$m1 * m2 * (w1 + w2)$
	Combined 12 (Best Case)	$mm * (w1 + w2)$

301

Key

n

Number of Rows in Original Columns (and in Original Table)

wj

Width of Column j in Bits (Minimized as in Method 100, Fig. 1A)

mj

Cardinality of Column j (i.e., Number of Different Values in Column j)

kj

Width of Widest Value in Column j in Bits (Typically, $kj > wj$)

mm

Maximum of m1 and m2 (i.e., Larger of the Two Values)

wm

Maximum of w1 and w2 (i.e., Larger of the Two Values)

FIG. 3